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0302E1334

Candidate's Seat No : _____

IMBA (Rep.) Sem.-1 (NEP) Examination

DSC-M-IMBA-113

Micro Economics & Essential Mathematics

Time : 2-00 Hours]

February-2025

[Max. Marks : 50

Q1. Write a note on Scope and Importance of Microeconomics. [10]

OR

Q1. What is the Law of Demand? Explain the Price-Output relationship with the help of Demand Curve. [10]

Q2. I. Explain in short, the Indifference Curve approach for Utility Analysis. Also write the properties of Indifference curve. [5]

II. Define Total Fixed Cost (TFC) and Total Variable Cost (TVC). Explain how they behave in the short run with their diagrams. [5]

OR

Q2. I. What is Perfect Competition? Describe the characteristics of Perfectly Competitive Market. [5]

II. What is Peak Load Pricing? State some advantages of this pricing strategy. [5]

Q3. Attempt any FIVE of the following: [10]

(i) What is the product of the first ten prime numbers?

(ii) Mr. X spends 30% of his monthly salary of Rs. 30,000 on rent. How much does Mr. X spend on rent?

(iii) The average of 11 number is 25, if each number is increased by 2. What will be the new average?

(iv) Dev completed the school project in 20 days. How many days will Arun take to complete the same work if he is 25% more efficient than Dev?

(v) Define Partnership.

(vi) If the ratio of present age of A and B is 9:4 and their sum of present age is 52 years, find the present age of B.

Q4. (A) Attempt any SIX of the following: [6]

(i) Find the highest common factor of 39,63 and 126.

(ii) What is the product of two odd numbers?

(iii) Two pipes A and B can fill a tank in 10 and 15 minutes respectively. If both the pipes are used together, then how long will it take to fill the tank?

(iv) The average result of 21 students is 17. The average of first 10 of those is 14 and the average of last 10 is 16. What is the result of 11th student?

(v) If weight of 7 students are 63, 54, 79, a, 65, 58, 49. Find the value of a.

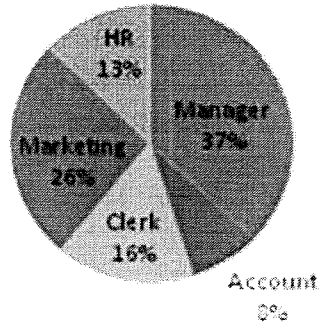
(vi) Find the mode of the following data:

3, 2, 4, 5, 7, 8, 8, 5, 7, 7, 9, 7, 8, 9, 5, 7, 4, 3, 2

(vii) The runs scored by 9 players of a cricket team are 44, 44, 50, 44, 50, 70, 44, 80, 40. Find the median of run scored by the players.

Q4. (B) Study the pie chart and table carefully based on that answer the following questions. [4]

(P.T.O)



The pie chart shows the percentage of Employees working in different government department.

Total number of Employees=1200

The table shows the no. of females in each department:

Manager	200
Account	40
Clerk	80
Marketing	167
HR	116

- What is total number of males working in department Manager, HR and Clerk?
- Number of Females working in Manager department is what percentage of total number of employees working in all the department.
- What is the central angle corresponding to the total number of clerks?
- What is the ratio of females working in department Manager and clerk and males in department HR and marketing?

Q5. For the Multiple-Choice Questions, choose one correct option out of four given options. [10]

- Which of the following is the primary objective of Microeconomics?
 - To measure the level of inflation
 - To determine government tax policies
 - To understand overall economic growth
 - To analyse how goods and services are produced and distributed in an economy
- Price Elasticity of Demand measures:
 - Percentage change in quantity demanded ÷ Percentage change in price
 - Change in price × Change in demand
 - Change in demand ÷ Change in price
 - Percentage change in price ÷ Percentage change in quantity demanded
- Utility refers to:
 - The demand for goods in a market
 - The price paid for a good or service in the market
 - The ability of a good or service to generate profit for producers
 - The satisfaction or pleasure derived from consuming a good or service
- What do you mean by Short run in economics?
 - Fixed costs are zero
 - At least one factor of production is fixed
 - All factors of production are variable
 - Variable costs remain constant
- Under Monopoly, a firm can decide:
 - Determine both the price and quantity independently
 - Determine the price and quantity but not both simultaneously
 - Avoid losses regardless of costs
 - Maximize revenue by selling at the equilibrium price

6. Price skimming is a pricing strategy where:
 - a) A high initial price is set and gradually lowered over time
 - b) Prices remain constant regardless of market demand
 - c) A low initial price is set to attract customers
 - d) A high initial price is set and gradually lowered over time
7. Which of the following is the three-digit prime number?
 - a) 113
 - b) 123
 - c) 133
 - d) 143
8. What is the unit digit in $43 \times 69 \times 551 \times 9243 \times 213$?
 - a) 1
 - b) 3
 - c) 9
 - d) 2
9. The Average age of four boys is 18 years. If their ages are in ratio 2:4:6:8. What is the age of the eldest boy?
 - a) 8 years
 - b) 16 years
 - c) 24 years
 - d) 32 years
10. The cost price of an article is 75% of its marked price for sale. How much per cent does the tradesman gain after allowing a discount of 10%?
 - a) 5%
 - b) 10%
 - c) 15%
 - d) 20%
11. What is the 2nd quartile of the marks scored in Mathematics, by 7 students are 15, 18, 9, 19, 13, 16, 16?
 - a) 13
 - b) 15
 - c) 16
 - d) 18
